Comments for JBLM's New Draft Municipal Separate Storm Sewer System (MS4) Permit and Fact Sheet

SUMMARY: EPA is proposing to reissue a National Pollutant Discharge Elimination System (NPDES) stormwater permit to Joint Base Lewis-McChord (JBLM) in Washington. JBLM owns and/or operates a municipal separate storm sewer system (MS4) that discharges to the following receiving waters: Clover Creek, Murray Creek, American Lake, and Puget Sound. The NPDES permit requires the continued implementation of a comprehensive municipal stormwater management program and outlines the management practices to be used by the permittee to reduce pollutants in their stormwater discharges. The permit establishes conditions, prohibitions, and management practices for discharges of stormwater from the MS4, and includes the assessment of water quality through a selected combination of surface water, stormwater discharge, and biological sampling. Annual reporting is required to provide information on the status of stormwater management program implementation.
https://www.epa.gov/npdes-permits/proposed-stormwater-permit-joint-base-lewis-mcchord-ms4

Document (MS4 Permit or Fact Sheet)	Section Number/Title	Comment
Permit	pg. 7 Acronyms	**Administrative Change Regarding Other Permits.** Request removal of Construction General Permit (CGP) permit numbers and update of all JBLM Multi-Sector General Permit (MSGP) numbers to WAR05F305. JBLM no longer has CGP permitting under one permit. Individual site operators request EPA permit coverage under the 2022 CGP prior to construction breaking ground. MSGP permit #WAR12F000 no longer applicable since 2015 permitting.
Permit	2.2.2	**Change to Permittee Coordinating Responsibilities.** Request amendment to language in fact sheet and permit regarding part 2.2.2. to prioritize intergovernmental coordination. "The EPA requires that the Permittee engage [local agencies and municipalities representing] those potentially affected by stormwater discharges in establishing stormwater management priorities." Permit states: "To the extent that stormwater management activities and decisions affect JBLM neighbors and nearby activities and operations, ~~public~~ [local government] engagement should be used to help set priorities for implementation activities with significant effects on those people and organizations."
Fact Sheet	Table 4, 2.3.1, 2.3.3.1.,	**Change to Status of CERCLA Investigation.** Request amendment to clarify establishing areas of known PFAS contamination is pending completion of the CERCLA remedial investigation. Known areas of contaminated groundwater plumes are not known to interact with the MS4.
Permit & Fact Sheet	Fact Sheet Table 4 & Figure 11, parts 2.3.4 & 2.3.4.1	**Coordinating and Focusing Monitoring Efforts.** Request removal of provision of wet weather outfall monitoring under the Draft MS4 permit considering the following: airfield discharge falls under a separate permit, the ongoing CERCLA investigation, and the known contaminated areas to be subsurface, the JBLM Stormwater Program. Outfall discharge associated with historical fire foam spills to the storm system along Clover Creek fall under NPDES MSGP no. WAR05F305 (sector S for airfields). We recommend the Draft Permit rely on IDDE program to incorporate PFAS sampling with dry weather screening and as needed as part of any future IDDE assessments. As an alternative, we recommend narrowing the focus to a smaller number of PFAS analytes at this time so we may better focus resources on the analytes that technology currently supports for monitoring. This would be more feasible to execute than wet weather monitoring for the number of analytes identified in the Draft Permit.
Permit & Fact Sheet	2.3.3.4.2, Fact Sheet Table 4	**Stormwater Education Program Focus.** Request removal of part 2.3.3.4.2 within the Table 4 PFAS requirements as this falls into health risk communication beyond the capabilities of an MS4 program conducting stormwater IDDE education. For context, standard reporting processes under the JBLM Environmental Division's Hazardous Waste program includes WA State Department of Ecology notification. Additional requirements for AFFF and/or PFAS spill reporting per the Army Policy for Response and Reporting of AFFF Usage and Accidental Releases are not limited to stormwater, thus implementation and DPW chain of command notifications fall outside of MS4 permit processes.
Permit	2.3.3.4	**Reporting Requirements.** Request removal of provision "Procedures for notifying affected parties" requirement with "immediate" notification. This appears to extend beyond State permittee requirements, which places JBLM under more stringent requirements and processes. Please note while it has been the standard practice of the JBLM stormwater program to notify local watershed councils (including Pierce County coordinating officials), the current spill reporting procedures under JBLM's hazardous waste program include reporting to Ecology, which is conducted in tandem and in addition to the stormwater program's EPA reporting.

Permit	2.3.4	**Coordinating Efforts between MS4 and CERCLA Investigation.** The Draft Permit requirements may create overlap with efforts to investigate the release of PFAS that are underway under JBLM's comprehensive CERCLA investigation. We request the opportunity to discuss further information from JBLM's Remedial Investigation under CERCLA to most effectively implement our Stormwater Management Plan (SWMP). Additionally, there is potential some areas carried over from the PA/SI to the Remedial Investigation by IRP may be eliminated as areas of potential interest from being actual areas of interest (i.e., PFAS contamination is not sufficiently found).
Permit	3.5 Wet Weather Monitoring for PFAS, 2.3.4	**EPA Guidance Needed for Effective Implementation.** Updated EPA NPDES sampling and QAPP guidance are needed to create new sampling plans and processes outside of established industry or state processes. At this time, the JBLM Stormwater Program finds proposed wet weather monitoring under part 2.3.4 to be infeasible to execute and produce representative data without established guidance for the following reasons: 1) The autosampler could potentially have components that contain PFAS, thus grab samples would be necessary. The program has been unable to find stormwater auto sampling equipment verified to be PFAS free. 2) Wet weather gear and equipment typically contain PFAS materials, thus compromising the data.
Permit	2.3.4.2, 3.5	**Economic and Practicable Implementation Concerns.** Request amending Permit to delay monitoring until EPA method finalization and stormwater PFAS guidance is available or adjusting to allow establishment of a plan within the new permit timeframe. Independent creation of new stormwater sampling processes, monitoring plan updates, new laboratory contract with limited facilities conducting required method for stormwater analysis, and purchase of new equipment is not feasible to execute in 18 months.
Permit	2.3.5	**EPA Guidance Needed for Effective Implementation.** Additional guidance needed regarding training of staff conducting wet weather monitoring. Lack of established processes, guidance manuals, and PFAS stormwater training likely to result in longer learning curve and IDDE program inefficient execution.
Permit	2.4.2	**Subbasin Treatment and On-Site Stormwater Management.** Request additional verbiage or allowance to waive on-site stormwater management requirements where subbasin treatment is in place or can be added at another location within the storm system to meet flow control and water quality requirements. This would better allow JBLM to focus on improving existing regional stormwater treatment facilities and better support redevelopment planning.
Permit	2.4.2.1	**Internal JBLM Regulations and Policies.** Recommend updating all statements regarding requirement to update JBLM stormwater Regulation 200-3 to include "or current comparable document" in the event this JBLM specific document is adjusted prior to or during the effective dates of the draft permit.
Permit	2.4.2.1	**Reference to SWMMWW.** Request amendment to language to support JBLM in implementing the best available guidance regardless of MS4 permit iteration: "the 2019 Stormwater Management Manual for Western Washington (SWMMWW) or most recent version available from the WADOE".
Permit	2.4.2.3	**Removal of WSDOT Manual as BMP Reference.** Request amendment to remove WSDOT manual due to concern three manuals for BMP selection will result in confusion and reduce effective implementation of current prioritized facilities that best address dissolved metals and 6PPD-q (e.g., natural dispersion, CAVFS, and bioretention swales or cells).
Permit	2.4.3.3 & 2.4.3.5	**Clarification of Inspection Requirements.** Please include "permitted" development sites to clarify inspection requirement on par with State permittees.
Permit	2.4.4.1	**Relevance of 2016 McChord Report.** Request removal of requirement to utilize the 2016 report to allow prioritization of system assessments and latest inspections and recommendations from JBLM Operations and Maintenance. The 2016 McChord report primarily recommends downspout disconnection and permeable pavement, which fails to address more impactful treatment facilities such as retrofit of existing oil/water separators to meet current and anticipated water quality treatment needs of the Clover Creek alternative TMDL plan.

Permit	2.4.5, 2.5.7	**Additional Training Time Required.** Request removal of provision of six month training timeframe, which is not required for State Permittees. Please note required processes beyond State requirements typically result in delayed timelines and inefficient application due to needed additional time, manpower, and resources.
Permit & Fact Sheet	2.5.6 & Table 4 fact sheet	I**nterference with Emergency Management Policie**s. Request amendment to language to remove clean up from firefighting activities from part 2.5.6 and Fact Sheet Table 4. AFFF discharge would only result due to emergency activities and/or spills. Direction on spill cleanup, hazardous waste management, and firefighting system maintenance is more appropriately addressed in the Spill Prevention, Control, and Countermeasure Plan (SPCC). Anything further from the stormwater program would conflict with other programs executing regulatory drivers (e.g., 40 CFR 261, 40 CFR 261, 40 CFR 280, 40 CFR 700, etc.).
Permit	2.5.6 & 2.5.7	**EPA Guidance Needed for Effective Implementation.** Please note additional guidance is needed for training of maintenance staff on PFAS and AFFF management practices. Storm system maintenance practices do not typically differ on airfield's or other areas receiving runoff from impervious surfaces. Adjustments to current established processes would require provision of new BMPs to inform processes and training.
Permit	2.5.8 PFAS Management at JBLM	**Update Current SWMP and SPCC for Responses to PFAS.** The JBLM Stormwater Program would like to propose SWMP and JBLM SPCC plan updates to ensure storm system assessment and coordination for AFFF spills in lieu of the requirement to create a PFAS management plan. Currently there is insufficient guidance available, potential conflict with other regulatory requirements on JBLM, and lack of chemical specific stormwater BMPs. Please consider stormwater spill response processes do not typically vary extensively in execution by chemical.
Permit	2.5.8.1 & 2.5.8.2	**Interference with Other Installation Programs.** Request amendment to language. PFAS management resulting from emergency firefighting activities (i.e., AFFF emergency discharge) as a distinct task not appropriately managed under a stormwater program. Spill cleanup direction comes from the hazardous waste program (RCRA) and remediation direction comes from the Installation Restoration Program (currently executing the CERCLA process), thus these tasks are not stormwater management driven and are recommended to be removed from the permit. Additional guidance and stormwater BMPs would be necessary to inform development of new protocols.
Permit	2.5.9	**Equipment Management and Storage Yards Inappropriate for Monitoring**. JBLM Stormwater Program would like to request removal of specifying PFAS/AFFF management in equipment maintenance/material storage yard SWPPPs. Fire foam chemical use and storage does not occur at heavy equipment maintenance or storage yards (e.g., motor pools or DPW shop yards) and facilities maintaining fire foams have indoor containment, thus a spill plan (e.g., SPCC) would fulfill all stormwater recommendations. Please consider guidance on chemical specific hazardous materials and waste management direction for hangars and fire stations is better suited to come from RCRA programs on JBLM.
Permit	3.3.5	**Request for Clarification.** The JBLM stormwater program would like to request further information regarding sources and reasoning for requiring continued collection of the breadth of the Pollutants of Concern and the amount of parameters required for collections at each sample location, which appear to be well outside standard requirements for WA State permittees for locations without approved TMDL plans.
Permit	3.3.6	**Monitoring Parameters and Phase-Out Procedures.** Request amendment to language similar to other EPA NPDES permits to identify "Parameters that are below minimum levels after two years of data may be dropped from the analysis". The JBLM stormwater program believes this will better allow long term phasing/project planning of sampling, data analysis, and proposed long term corrective actions or BMP implementation following discharge characterization.

Permit	3.3.7.4	**Quarterly Sampling is Sufficient.** Request continued frequency of quarterly monitoring of the JBLM stormwater canal outfalls to support effective sampling and continuity across the stormwater monitoring programs (MS4 and MSGP). Additionally, it is unclear what actions additional data from monthly collection would inform at this time given root cause and corrective actions are underway to include system retrofits.
Permit	3.3.7.4	**Special Condition for JBLM Stormwater Canal.** Request additional to language to allow termination of JBLM stormwater canal monitoring specified in the 2016 Letter from the EPA of additional monitoring requirements following construction of new treatment facility for the L005 drainage basin and sampling to verify L004 and L005 treatment facilities are effective. Please note these two outfalls are the only sources of stormwater direct discharge to the Puget Sound.
Permit	3.3.7.5	**Pierce Country Alternative TMDL.** Request replacing part 3.3.7.5 Water Quality in Clover Creek and Murray Creek with proposed monitoring with Pierce County's proposed Alternative TMDL Plan. Please note concerns regarding required monitoring beyond the Western Washington Phase II permit part 8 Monitoring and Assessments, and preference to coordinate with Peirce County to establish monitoring procedures and gage stations to meet long term goals within the watershed.
Permit	Table 3.3.7.5.a	**Request Removal of J003.** Request removal of J003 from Clover Creek sampling. Note 1 in table states continued monitoring, however, this outfall was previously removed from MS4 permit discharge monitoring following the retrofit to the system. Additionally, please note inclusion of another sample point will result in JBLM monitoring seven (7) total discharge locations, which exceeds State permittee maximum sample location requirements.
Permit	3.3.8	**Biological and Habitat Monitoring.** Request removal of provision of the requirement in part 3.3.8 to conduct Biological and Habitat Monitoring. This requirement appears to exceed State permittee monitoring requirements under the Western Washington Phase II permit. Please note benthic data from JBLM appears to be more representative of issues associated with historic channelization and invasive vegetation within and beyond JBLM's fence line rather than tied to stormwater discharge.
Permit	3.8.3	**Relevant Reporting Period.** Request adjustment of "relevant reporting period" for monitoring reports from Oct 1 - Sept 30 to allow time for data analysis completion prior to annual report summary.
	General comment	**Request Additional Time for Implementing New Programs.** The JBLM Stormwater Program would like to express concerns regarding the feasibility of meeting all requirements within drafted permit timelines and period of coverage due to the following: 1) Increased and additional monitoring requirements, 2) Creation of new plans and extent of required plan updates, 3) Funding requests to address new projects and increased manpower, and 4) Potential delays resulting from contracting negotiations to meet requirements beyond standard processes or existing guidance.
Fact Sheet	Part III. Pg. 7	**Request Edit to Specific Language.** Request amendment to the following sentence to include verbiage in brackets: "The MS4 within the northern portion of JBLM-Main, which includes Madigan Army Medical Center and the Logistics Center east of Exit 122 on Interstate 5 [treatment facilities and outfalls have potential to overflow] to Murray Creek."
Fact Sheet	Part III. Pg. 8	**Request Edit to Specific Language.** Request amendment of the following sentence to include verbiage in brackets: "Main Gate and Gray Army Airfield east of the Main Gate at I-5 Exit 120) drains to two stormwater treatment and infiltration facilities, both of which can overflow to marshes west of I-5 [during high flow storm events].
Fact Sheet	Part III. Pg. 8	**Request Edit to Specific Language.** Request amendment of the following sentence to reflect surface and groundwater flow given the minimal amount of JBLM stormwater to these areas: Overflows from two of these marshes, Bell Marsh and Hamer Marsh, are conveyed to the flow interacts with southern portion of the JBLM Stormwater Canal prior to Sequalitchew Creek.
Fact Sheet	Part III. Pg. 8	**Request Edit to Specific Language.** Request amendment of the following sentence to include verbiage in brackets: The canal was originally constructed to avoid sending excess stormwater through Sequalitchew Creek when creek capacity is exceeded, [however, current and future function does not include any stormwater conveyance to Sequalitchew Creek.]

Fact Sheet	Part III. Pg. 8 Overview of Discharges from the Cantonment Areas on McChord Field	**Request Edit to Specific Language**. Request amendment to update the following: The McChord Field cantonment area drains approximately 415 acres through a central MS4 discharging to Clover Creek. [The creek flows westerly through the communities of Spanaway and Parkland before entering JBLM at its eastern boundary. About 800 feet downstream of the boundary, the Morey Creek tributary joins Clover Creek. About 1,000 feet downstream of the boundary, the creek flows under the McChord Field main runway in one 50-foot diameter concrete bridge. The creek daylights on the west side of the runway and flows adjacent to the McChord Field hangar/industrial complex, then off-base under Interstate 5.] Clover Creek flows west...
Fact Sheet	Part III. Pg. 8 Overview of Discharges from the Cantonment Areas on McChord Field	**Clarification of JBLM MSGP Outfalls.** Recommend update to clarify JBLM MSGP outfalls include J001, J005, J009, J016, J017, J020, J023, J027, J035 and J036.
Fact Sheet	Part III. Pg. 8, Overview of Discharges from Training Areas on JBLM	**Request Edit to Specific Language.** Request amendment to update the following: Stormwater runoff from the training areas ~~generally~~ infiltrates on site ~~or follows natural drainages~~. Aside from MS4 structures in the Leschi Town, there ~~are no MS4 structures within the cantonment area. There~~ are no significant MS4 features in the [training] ~~cantonment~~ area[s]. [No stormwater discharges from the training areas] ~~that would drain~~ to Muck Creek, the Nisqually River, or Puget Sound.
Fact Sheet	Part IV. Receiving Water	**Receiving Water vs. Watershed Summary.** Request amendment to language. Currently, the receiving water summary is better identified as a watershed summary, given the lack of direct discharge to Sequalitchew Lake or Creek. Also please note most discharge points near wetlands on JBLM are located within 100-200 feet of woodland prior to wetlands. "The Murray/Sequalitchew Watershed includes Murray Creek, American Lake, Sequalitchew Lake and Sequalitchew Creek. All are entirely or partially located within the boundaries of JBLM and part of both WRIAs 11 and 12. The Murray Creek Subbasin is bounded on the west by Puget Sound; the northern boundary runs through JBLM-North and the City of Lakewood and includes Gravelly Lake; the eastern boundary runs through JBLM- McChord, and along the Burlington Northern Santa Fe Railway tracks. The southern boundary includes the southern portion of JBLM encompassing Gray Army Airfield. Murray Creek discharges to American Lake. As previously noted, overflow from Sequalitchew Lake, nearby wetlands, and several infiltration facilities is conveyed through the JBLM Stormwater Canal to Puget Sound. The JBLM MS4 does not discharge directly to Sequalitchew Creek."
Fact Sheet	Part IV. Receiving Water	**Request Edit to Specific Language.** Please consider replacing "several infiltration facilities" with "two stormwater treatment facilities".
Fact Sheet	Figure 1: Sub Basins of McChord Field	**Administrative Note.** Please note the majority of MFOF-03 and all of MFOF-38 need to be removed and/or adjusted to reflect on site treatment and infiltration.
Fact Sheet	Page 23	**Accurate Description of Culverts.** Request update of the description of culverts to one 50-foot diameter pre-cast concrete bridge designed for the 100 year flood flow with over 3 feet additional freeboard. River rock substrate was added along with designed thalweg and low flow channel for year round fish passage. Additionally, lighting was added per NMFS guidelines.
Fact Sheet	Page 24	**Clarification of Infiltration Facility.** Request language amendment or update to reflect the additional infiltration facility between the first facility for J003 prior to overflow connection to the storm system. The first infiltration facility has not been observed to overflow to the second facility.
Fact Sheet	Page 24	**Clarification on Remaining Acreage.** Request amendment to language describing the J003 drainage basin. The majority of the remaining 25.85 acres of the J003 drainage basin are pervious surfaces including grassy fields and a running track. Runoff from the parking lot in the basin is routed through an oil/water separator prior to reaching the outfall in the creek.